NATIONAL REPORTS ON THE LABOUR MARKET SOFT-SKILLS

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INTRODUCTION

Over recent years, soft-skills have become a much more important topic in business and academic environment. Although higher education institutions (HEI) are putting great efforts to develop soft-skills in the education curricula, the business leaders still believe the workforce is experiencing a soft-skills gap. The famous adage goes, “You get hired for hard skills, but get fired for soft-skills.” The current soft-skills gap in the workforce has not closed in recent years and does not indicate any signs of this trend reversing. Businesses are stuck in a soft-skills dilemma. They want their employees to possess these skills, but are reluctant to train or develop them in their employees.

Taking about the definition, soft-skills are largely defined as personality traits, interpersonal skills, social skills, emotional intelligence, and more that drive people to operate. They typically complement hard skills to help people accomplish goals and/or objectives. Putting soft-skills in other terms, they are the non-technical, often hard to visualize skills. They are also called intangible or social skills at times.

In this context, it is valuable to analyse the situation regarding the acquisition and application of soft-skills in some European Union countries, to evaluate the reaction of employers for the soft-skills of the labour force and to assess how the HEI respond to the need of labour market regarding the soft-skills strengthening.

The main aim of the report is to provide the overview of the current situation in five EU countries regarding the soft-skills that are developed in HEIs and required by the national labour market. The specific aims are the following:

- To define and classify labour market soft-skills at the national context;
- To explore the soft-skills required by employers for local employees from a demand perspective;
- To explore the soft-skills graduates are acquiring in national HEI from a supply perspective;
- To identify the soft-skill shortages and imbalances;
- To provide the examples of good practices in matching the requirements for graduates’ soft-skills and labour market;
- To generalize the main trends and requirements for the soft-skills at the national labour markets.
This report represents the situation about the current situation regarding labour market soft-skills requirements in five project partner’s countries: Belgium, Italy, Lithuania, Romania and Spain.

**Methodology.** In order to reach the main aim the desk research was carried out. The desk research helped to explore the existing labour market situation in every partner’s country with regard to the issue of soft-skill mismatch. Particular attention was paid for the identification of soft-skill imbalances between soft-skills supply and demand in the local markets. The main sources for the desk research were national policy papers, labour market and skills strategies, research articles, statistical databases (OECD, Statista, and local producers of statistics).

This report generalizes the prevailing information on the EU country’s labour market with special focus on soft-skills requirements and shortages and presents insights for the more sustainable development of the labour markets in terms of soft-skills integration and compliance with the needs of the labour market.

### NATIONAL REPORTS ON THE LABOUR MARKET SOFT-SKILLS

#### Belgium

**Defining and classifying labour market soft-skills at the national context.** Belgium is a federal state subdivided in three regions (Brussels, Flemish region and Walloon region) and three language communities (Flemish community, French-speaking community and German-speaking community). This decentralized organization allows to promote a bottom-up approach, where administrations hold resources and authority to discover and face their own needs and threats.

Flanders denominates the concept of soft-skills as “Sleutelcompetenties”, a term that can be translated as Key Competences (VMOV, 2019). These “Sleutelcompetenties” are defined both as multifunctional skills, or, as transferable skills. As multifunctional, “Sleutelcompetenties” are contemplated regarding the importance of knowing how to react against different challenges, to achieve diverse kind of objectives, or complete varied tasks. As transferable skills, it highlights their flexibility to be used under different situations and contexts.

17-th of January of 2018, Flemish Parliament approved the decree that is nowadays ruling how the “Sleutelcompetenties” are being implemented in the educational system in order to guarantee all Flemish students acquire during the compulsory education. This decree enlists 16 competencies that are thought to cover all subjects needed for the future introduction of the students on the labour market, which are:

- Competencies on the field of physical, mental and emotional conscience, and in the field of physical, mental and emotional health care.
- Dutch competencies.
- Foreign languages competencies.
- Digital competencies, specially considering the media alphabetization.
- Social and relational competencies.
- Mathematics, science and technology competencies.
- Citizenship competencies.
- Historical conscience competencies.
- Spatial competencies.
- Learning competencies, including researching, innovative thinking, creativity, problem-solving and critical thinking, systematic thinking, information process and collaboration.
- Self-conscience and self-expression.
- Initiative, ambition, entrepreneurial skills and professional competencies.
- Cultural expression and conscience.

This line of effort is supported by the VDAB, the employment and adult education office in Flanders. It provides an increasing number of courses for both unemployed and employed. Regarding soft-skills, the offer is constantly increasing, covering a growing number of topics, from mindfulness and resilience for unemployed to calculation or social rights.

Meanwhile, the French Community the definition of terms is subject of a wider debate within all the French-speaking countries (“francophonie”). The most similar expression compared with English is the “savoir-être” (know-how to be, soft-skills), related with the “savoir-faire” (know-how to do, hard skills) (Boancă, Starck, 2019). It is considered as the knowledge that involves the personality of the individual, and not the knowledge learned. However, this category is broad and comprehensive, and there are two terms used for a deeper understanding of what constitutes the savoir-être, and its’ application.

The first of them is the concept of “compétences transversales” (transversal skills). Already implemented by the French Community since 1997, they are considered as the generic competences valuable on diverse contexts and workplaces, even though they are not useful on each different situation, and they are the most studied concept, and the most implemented on the university curricula (SPF, 2019). This includes the base-skills, such as language competencies, the basic familiarity of mathematics or even the ability to face bureaucratic issues, which are not the core of any profession, but they are part of daily life of most of the actual times jobs. Furthermore, the “compétences transversales” include behavioural proficiencies such as teamwork, adaptability or communication, that determinates the way of working of each person. There are generally five accepted groups of transversal activities:

- Organisation
- Adaptation
- Autonomy
- Sociability
- Communication
The other term is “compétences transferables” (transferable skills). Those are the skills inherent to some task, but also useful on a different professional context (SPF, 2019). These skills come from the development of some activity, and the consequent apprenticeship of collateral abilities: it might be the knowledge on treasury on a company, with all the personal methodologies learnt on the progress of a life career, or the capacity to identify process during an activity, which might be transferred to another lifepath in case of need.

The FOREM is the authority in charge of improving the employment on Wallonia. It provides a specific course for soft-skills improvement that regards this conceptual segregation, adapting the contents to each participant with the support of a personal coach, who uses this position to examine the needs of the aspirants and propose measures to face them (FOREM, 2019).

To finish, the Belgian Federal Authorities are internally using a framework called “5+1” of Hudson (CSE, 2019). It switches five different group of soft-skills (information, working, colleagues, relations and personal working management), plus the hard skills needed to develop the job analyse. Those five groups of skills are graduated through a system of eight levels of expertise. This plan is supported by a dictionary of terms, including the didactical materials needed to understand and implement it, and it is encouraged to adapt this skills system on companies and administrations all around Belgium.

The soft-skills required by employers for local employees: demand perspective. Belgian current labour market is suffering a paradox situation. While the federal unemployment rates are lower than the 6%, Belgium suffers strong regional differences. Flemish rates are below the 4%, while Wallonia overcomes the 8%, and the capital district of Brussels, the 13% (SRD, 2019). Furthermore, the evolution of the economy, and its digitalization, is demanding an increasing number of skilled talent that the country is not sufficiently able to attract. Even knowing the good employment rates of the country, Belgian stakeholders are concerned on the importance of making the economy more resilient and adapting it to the challenges that the country will have to face.

This lack of skilled aspirants creates a situation denominated “labour bottleneck”. This bottleneck does not affect all the entire economy, but to several strategic sectors with a very diverse level of educational requirements (European Commission, 2015). Belgian employers claim that there are three main origins of difficulties to discover the applicant that completely fits the needs of their vacancies: a shortage of specialized graduates, the miss of a curricula adjusted to their necessities, and the absence of some essential soft-skills.

As it has been underlined by Adecco (Adecco, 2017), a company that has done a strong effort to calculate how is the acceptance of soft-skills for Belgian employers, there are already the requirements, but means to hold them are still missing. This lack of ability affects during three main segments of the career development: recruitment procedures, adaptation to a new work team and interactivity through the work life.
The mentioned study concludes that many young people arrive to labour market after their studies with their hard skills well established but with a lack on soft-skills. Belgian universities are doing well providing a good quality education, but for most of new jobseekers, deprived of a previous work experience, soft-skills make the difference for recruiters.

During the recruitment process, the skills primarily demanded for the employers are those related with communication, personal ethics, emotional intelligence and the capability to adapt to changes and challenges. More than 81% of those involved on enrolment of new staff said on the survey that support this study that they rejected those who missed soft-skills - that is why candidates and workers need to improve them.

Monster (Monster, 2019) has also researched on this topic and goes even further: 85% of recruiters involved on their study has taken in account the importance of soft-skills during the process of recruitment. It also emphasizes that SMEs are especially sensitive to soft-skills regarding enrolment process, as much as their size force them to pay attention on how people included their staff will be able to incorporate on their structure as fast and efficient as possible.

Regarding judgment, the extreme number of 97% of the survey sample considers soft-skills are crucial during the interview. This survey shows there is a division in two almost symmetrical sides of this 97% between those that considers soft-skills as a selection criterion (44%) and those that see them as complementary of the hard skills (52%). Anyway, it shows the increasing importance that soft-skills are being given for Belgian recruiters.

After the recruitment process, there is a strong need to promote the adaptability of new members of the staff into their work team. Even knowing the recruitment process has been working as a filter for this situation, it is always a challenge to become part of a new team group. The promotion of the ability to change of work environment is a strongly valuable and demanded skill. It is also important to highlight the difficulty to prevent if a new employee will be able to adapt to the new workplace, however it is a strongly desired capacity.

Even though, this subject is important to be encouraged during the working life of all the labour force. Since 2017, Belgian workers shall use 5 days per year for their training and improvement of their skills. The regional offices in charge are offering courses and seminars to increase also the social capabilities of Belgian workforce. For standardizing purposes, we will use the mentioned “5+1” Hudson scheme to explain how the soft-skills are considered in Belgium (CSE, 2019). It considers that the development of any skills has some basis to begin, and from to develop until the complete acquisition of it.

- Information management: It consists on the understanding information, facts, perceptions, knowledge and ideas in order to ensure the development of new information and acquiring new knowledge. The evolution of this module begins by understanding information, and continues with its assimilation, analysis, integration, innovation, conceptualization, and finishes with understanding under its context and developing some view.
• Working management: It involves the organization and structuration of tasks and duties, from its design to its realisation in order to ensure the optimal success. This module about working covers the executing of tasks, its structure, problem-solving, decision, organization, service management, organization management and piloting the organization.
• Colleagues management: It concerns the administration of personal relations with all colleagues, in a functional or hierarchical context, in order to ensure the improvement of mutual profit and stimulation of its development. This module covers the communication of own ideas, helping others, directing colleagues, motivating others, encourage others development, encouraging collaboration, direction of groups and teams, and inspiration.
• Management of relations: It comprises the administration of personal relations with all the colleagues, out of the need of a hierarchical context. This module covers communication, comprehension of others, work-team, service-orientation, advising and influencing others, establishing relations and networking.
• Personal working management: It covers the direction of own capabilities and organization, in order to ensure the improvement of the own personal efficiency. This module covers respect, adaptation, probing reliability and engagement, stress management, self-development, results-mind and implication in the organization.

The soft-skills graduates are currently acquiring in national HE institutions: supply perspective. Talking about the insertion of recent graduates into the labour market always arrive to the point where companies and enterprises grumble about how unprepared they are to be introduced. It usual to listen complains about “babysitting” and claims to the HEIs to fashion their plans and methodologies to make them more reliable to modern work environments. However, it is important to remark that HEIs are, by their own nature, a different environment of workplaces, with different requests and imperatives.

In the context of employability, an important role of higher education institutions is to provide graduates with the skills that will enable them to find jobs after graduation. It is generally accepted that the fact of studying a degree improves indirectly some soft-skills, for example:

• Communication: The ability to learn abstract ideas and write them down on a document is constantly developed during the university studies on all branches of knowledge. Furthermore, it is also common the use of lectures as a learning tool, which also accustom students to communicate their ideas with a public audience.
• Budgeting: Students must manage their personal budget, which is also a challenge regarding university studies usually are not paid. That forces students to learn how to earn money and use it wisely.
• Time management: University degrees are built up around the concept of deadline. Both exams and projects are always fixed on dates that are not negotiable, and that compete each other for the students’ attention. The
management of this make graduates more reliable on their capacity to manage time.

- **Critical thinking:** Graduates have been trained during their university period on how to face ideas that are considered as complex, understand them and usually, confront with them. It makes them more prepared to think critically about issues that are common on daily work.

- **Problem solving:** This soft skill, really attached to the previous one, is also improved during the university period. Any high education course is implicitly based on the idea of make students solve problematics that are new for them, increasing their ability to apply this mental process during all their work life.

- **Taking constructive criticism:** Being examined and corrected is an unavoidable consequence of studying in the High Education Institution. This process helps graduates to accept critics and to be able to criticize with appropriated manners to their peers.

However, the decentralization of the education and training system in Belgium, and the fact that soft-skills are given a secondary role in the policy agenda make the research on soft-skills difficult. This forces to conducts the research through a bottom-up approach, instead of a top-down methodology, which would clarify easier.

Once this said, Belgian universities are trying to enhance the capacities and abilities of their students to be more reliable to be introduced on the labour market. The Quality Agency for the Higher Education Evaluation (L’Agence pour l’évaluation de la qualité de l’enseignement supérieur, AEQES) is the institution in charge to assure that the HEIs in the French Community, while the Interuniversity Flemish Council (Vlaamse Interuniversitaire Raad, VLIR) is in charge of the universities of Flemish Community. They produce transversal analysis through different branches of studies (social sciences, laws, pharmacy) on all the different universities they oversee.

These analyses provide both, information and recommendation for the stakeholders, and it is strongly considered the future adaptation of the students on the labour market and their future workplaces. For instance, French Community has developed modules of Professional Integration Activities (Activités d’intégration professionnelle, AIP), which are strongly encouraged by AEQES (AEQES, 2019). Those AIP promote not only the future adaptation of the students, but they are also designed bearing in mind the competences the student will acquire. Furthermore, it is also remarkable the importance that the soft-skills have on the design of the curricula, which must be developed on the brochure of courses, degrees and masters.

Around Belgium, several universities promote a range of courses and seminars to enhance the soft-skills of their students facing what they consider as their own needs – reinforcing and taking advantage of the bottom-up approach dominant on this topic in Belgium. The University of Namur has established an initiative called U2ES, presented as additional courses correspondent to 14 credits ECTS in all, which aims to foster a variety of soft-skills on their pupils in all levels of college (bachelor/master/PhD). The courses are covering mainly organisation skills, communication and personal development, trying to encourage the knowledge and usability of the subjects covered.
during the life career of the participants, specially on their first job applications. U2ES courses are designed to be flexible and independent, being able to last from 6 months to 2/3 years.

The University of Gent hosts the HoGent – Centre for Entrepreneurship. This centre carries out research and services for entrepreneurs, facilitating so their position as a bridge on the gap between universities and the labour market. While engaging in the Centre’s activities, students are able to acquire knowledge about entrepreneurship and the business world, obtaining a first relevant practical experience of work that is proofed with a certificate.

The ULg (University of Liège) is concerned on the importance of providing the PhD students with a valuable experience that can be useful on their future. Even though PhD is usually carried out to continue exploring academic positions, the University of Liège is conscious of the existence of the option that future doctors might not want to follow this path – and even though for those who actually want to stay in an academic position, it is not always possible. By so, the ULg has developed a brief of trainings on specific soft-skills in order to enhance them.

They are also involved on another initiative called “Logistics in Wallonia — Soft-skills Certificate”, a training programme focused on the self-discover and encouragement of the participants’ flexibility, leadership, team-working, self-development, interpersonal skills, ability to work in multicultural groups and problem-solving capacities. This programme is jointly created and managed by a consortium of Wallonian Universities (Haute Ecole libre Mosane, Haute Ecole Charlemagne, Haute Ecole de la Province de Liège, Pôles de compétitivité MecaTech et Logistics in Wallonia, Service Formation continue de l’Université de Liège) and “Logistics in Wallonia”, an association of 265 members from different fields (industries, infrastructures management services, research centres).

Identification of the soft-skill shortages and imbalances. As it has already been stated, Belgium is a country organized federally, where the different communities have a wide framework to detect their needs and threats and develop the appropriate policies to face them. The communities have different stakeholders involved on a constant dialogue and exchange of ideas. The organizations that embrace companies of both linguistic areas are constantly analysing the economic environment and the labour market, preparing themselves for future challenges. As educators of their future staff, the associations that embrace several local enterprises have claims for the universities in order to accurate their future education.

Flanders is seeking to be one of the cutting-edge areas of the European Union. Regarding so, the requirements are more ambitious, and the measures proposed are further. While other countries are considering how to encounter their unemployment rates, Flemish Community is willing to promote the development of the state to compete with the most advanced economies of the world, triggering their high education institutions to promote and attract talent (CSE, 2019). This position provides the HEIs on the region to improve their selves, but it is also a behavioural conditioning that might stress their
resources. The application of different strategies can both be an input or a brake, even though is widening the presence of soft-skills on the Flemish curricula.

The “Vlaamse Adviesraad voor Innoveren en Ondernemen” (Flemish Advisory Council for Innovation and Enterprise), or VARIO, is a strategic advisory body for the Flemish Government for science and innovation. On its Memorandum for 2019-2024, VARIO encourages the Flemish Governments and the public universities to encourage the developing of talent on the region. It is based on the idea that the actual and future students will eventually work in jobs that not already existing.

It requests to increase the efforts on key competencies. In a quickly changing world, it is considered the importance to provide the students with continuous learning attitude and generic skills: team working skills, openness to different cultures and contexts, clear communication abilities… A new educational strategy, that fosters the work experiences and raises the training courses, which shall facilitate their future incorporation to the labour market. It also proposes measures not only to develop the students’ talent, but also to maintain them on Flanders and to attract talent, promoting the adaptation of foreigners by several measures that include facilities to learn the language (VARIO, 2018).

Meanwhile, French Community universities is facing a less stressful position, but also dispose of less high ranged goals. The influence of the near France is invaluable, providing both the university and their business world stakeholders an important and deeply developed framework to denominate their aptitudes. Soft-skills are already arranged on all the student plans and courses syllabus, but as AEQES uses to remember on the different transversal analysis, the application might be improved on several scenarios.

The Wallonian Union of Enterprises (Union Wallonne des Entreprises) is the biggest confederation of companies on the French Community. It is concerned on the issues that the education of this area is suffering, especially in contrast with the Flemish areas. Traditionally, the performance of the French speaking students on international tests as PISA has been triggered by the comparison with their neighbours, which is also remarkable if it is considered the faster development of the Flemish economy and employment rates (CESW 2013).

Although they are satisfied with the main trends of the education of the French Community, the Wallonian Union of Enterprises is asking for improvements on the following topics (CESW 2013):

- Reinforcement of the base knowledges, especially languages and mathematics.
- Support of the soft-skills as a subject during all educational process (not only but also tertiary).
- Strengthening of the numerical subjects.
- Encouragement of individual success, willing to improve the global performance of each student and so on, the complete system.
Federally, the biggest issue is the diversity of languages. The big breach between the French and Dutch regions hinders interregional mobility and contributes to differentiate the march of their economies. Motivation is also a soft skill already demanded: the ability to motivate own self is considered one of the most important of those that are not being encouraged enough, especially on those areas that requires strong enthusiasm as for example, commercial and sales positions. Most advanced and technical positions are willing for candidates with critical thinking and problem-solving skills, but also the capacity of learn to learn. Those spots are in a constant evolution, which means that the employees will need to know not only to create and resolve unexpected issues, but also to constantly update their knowledge, which also implies to be able to be resilient and proactive.

All together demonstrates an important concern of the business world on the tertiary education. As it has been shown, both linguistic areas share the same ends and desirable means, but they are not facing the same issues, even though the Belgian economy and labour market are doing well compared with other European Countries.

Good practices in matching the requirements for graduates' soft-skills and labour market demands. There are some examples of good practices in matching the requirements for graduates' soft-skills and labour market demands:

“Boost your skills” at the University of Namur (Belgium). The aim is to check if the University of Namur research policy and the ongoing actions comply with the European regulations, then to define a strategic plan to ease potential deficiencies. This audit must be achieved with all the relevant actors: researchers, HR & training managers, research managers as well as the different academic & scientific representative bodies. The principles are manifold: to improve the researchers' working environment & encourage mobility, and to support transparency in the management and the university governance. Work is advanced and the European Commission awarded the UNamur the "HR Excellence in Research" label in 2013. As it is a continuous quality process, the objectives are checked over a period of 3 years. An auto-evaluation confirmed the label in 2016 and an external evaluation by European experts is scheduled in March 2020. The Euraxess team is at the service of researchers to provide an enabling environment for research and contributes to the Human resources Strategy for Researchers (HRS4R). More information: http://u2es.unamur.be/introduction

HOGENT at the University of Ghent (Belgium). The mission of HOGENT is reflected in its student mobility, its guaranteed transparent use of ECTS, the stimulation of active staff mobility, the support of international educational projects and international institutional cooperation through internationalisation of curricula and internationalisation at home. The international office is a central unit which stimulates, informs, counsels and supports HOGENT in its endeavours to shape this objective. This international orientation is highlighted even more by our participation in Ghent University Association, which aims at an international profile. This partnership enables us to reshape our European and international policy by taking into account the priorities set by the European Community. More information: https://www.hogent.be/en
**Training on Soft-skills for PhD students at the University of Liège.** For a few years, the R&D Administration of the University of Liège (ULg) has set up a large panel of transferable skills trainings for its PhD-candidates. The objective: helping PhD-candidates to develop their competencies and boost their career development, promote the acquisition of “soft-skills” and additional qualifications. More information: [https://www.ulg.ac.be/cms/c_775258/en/soft-skills-for-researchers](https://www.ulg.ac.be/cms/c_775258/en/soft-skills-for-researchers)


**Generalization of the main trends and requirements for the soft-skills at the national labour markets.** Belgium has a modern economy with a dynamic economy and a labour market showing good rates of employment. It has a network of public universities that provides quality education for the future manpower of the country, and even though there are regional differences, all around the country are encouraged different initiatives to increase the soft-skills of future graduates.

Flemish Community is considering soft-skills as toolkit of competences that provide the individual with the ability to react to different challenges, and that might be used under different situations and contexts. Those key competences are being planned to be developed in order to strongly increase the economic growth of the country on the future, relating the increasing of talent, and the collection of it, with the possibilities of the area in the future. It is part of bigger strategies that are trying to improve an already very well performance of both the economy and the labour market.

On the French Community, there is a deeper debate, very connected with the nearby France, about what is an actual soft skill. This debate, that provides an accurate framework to study and perform the teaching of soft-skills, is part of strategies that are looking to improve the performance of the economy and the labour market, but are already installed on the minds of the courses designers in all levels, allowing a profound and precise knowledge of this subject in this Community.

From a global point of view, it is doubtless that Belgium has done, and keep doing, a strong effort to introduce the soft-skills on its’ curricula. However, there remain strong non-correlation and internal decoupling (especially around the topic of the language) that obstruct both a national standardization of concepts and systems and the harmonization of the economy and labour market performance. Furthermore, the absence of a coordinated authority and the tendency to face this issue with a bottom-up approach hinders the production and analysis of results.
However, it is important to highlight that Belgium, as many other European countries, has invested substantial amounts of money on the high education – which concerns to the hard skills. As a result, there is an increasing tendency of over qualification, while authorities are trying to break up the labour bottlenecks that affects several sectors of the economy of the country.

That is why there is an increasing interest on soft-skills for universities. The universities have a commitment to increase the employability of its students, despite they are producing standardized generations of future competitors on job applications. The soft-skills provides the capacity to promote the individual strengths, and by the capacity of showing them, they might facilitate the personalization of the students profile for future Applications.

**Defining and classifying labour market soft-skills at the national context.** Italy has a population of 60.4 million and a GDP in 2019 of about 1.787.7 billion euros with a very limited growth in last years and a little reduction (- 0.2%) in 2019 (Figure 1). In terms of Real GDP per capita (about 40.000 euros in 2019), it is more or less the same as in 2000.

**Labour market structure and economic challenges addressed.** Concerning the labour market, even though the employment rate has risen (59.3% of working age population in 2019), it is still one of the lowest among OECD countries, especially for women. Job quality is low and the mismatch between people’s jobs and their skills is high by
international comparison. Unemployment rate is still high (about 12% in 2019), and even higher for young people aged between 15-24 (Figure 2).

Figure 2. Italy unemployment rates from 2005

![Unemployment rates and youth unemployment rates](Source: OECD Labour Force Statistics database)

Given this context, while Italy does well in some areas of well-being, such as health status, it really underperforms in areas such as education and skills. This implies that the future of work in the Country will be characterised mainly by low and medium level jobs. In fact, according to CEFEDOP “The employment growth will be driven by administrative services, health & social care and professional services, with office associate professionals, cleaners & helpers and teaching professionals being the fastest growing occupations. Only around third half of total job openings (including replacements for vacated jobs) till 2030 will require high-level qualifications; job opportunities for people with medium- and low qualifications will still be ample”.

The existence of a “skills emergency” in Italy is clearly witnessed by the European Skill Index (ESI) by CEFEDOP, where Italy ranked last in the 2020 release with a particular bad performance in terms of skills activation (see table 1). Furthermore, the national scenario for skills’ assessment is very fragmented and only recently tackled to join to a common definition of skills.

As a result, the Italian National Qualifications Framework (NQF) was adopted only in 2018.

Table 1. Italian results in ESI 2020
The soft-skills required by employers for local employees: demand perspective. Generally speaking, what became evident in Italy and in all EU countries in recent years is that the growing complexity of the labour market, asking for new jobs and related competences has pointed out an overall qualification and skill mismatch and a consequent jobs’ instability.

As a result, it is crucial to develop those skills which support the individual in better addressing the needs and changes of individual's personal and professional life. The issue of analysing the soft-skills required by labour market in Italy is currently managed by the National Institute for Public Policy Analysis – INAPP that provides guidance and support with regard to the governance of social and labour policies.

To this regard INAPP has recently published an interesting work analyzing the skills’ demand from companies and discovered that “companies looking for technical operative and social skills show lower labour productivity as compared to other firms. On the contrary, companies characterized by a need in managerial, STEM or humanities-related skills show higher productivity”.

Source: CEFEDOP
Nonetheless, given the value of soft-skills to access the labour market, what is still missing in Italy is a common definition framework capable of showing a clear link in the school-work transition. Indeed, several lists and initiatives connected to soft-skills needs and development are available but none of them seems capable of offering the entire picture of the soft-skills value-chain.

For instance, INAPP publishes periodically a report about knowledge and skills needs of employees in Italian companies. The last report, published in March 2019, highlights that 1 company out of 3 declares to have at least an employee with skill mismatch. Furthermore, the need for skills is far more evident in big companies than in SMEs with different level of demand across the sector: the biggest request comes from the health, education and social care services, while the lowest from heavy industries.

An important evidence from the report is that among the 4 most wanted skills, 3 of them can be defined as soft ones. In fact – together with technical skills, companies feel a mismatch especially for what concerns problem solving, communication and resources’ management (see Picture 1).

*Picture 1. Infographics about knowledge and skills needs of employees in Italian companies*
Even if INAPP report offers several useful information for analyzing the Italian skill context from the employer perspective, it is not clear how the education system should cooperate with and for the labour one to foster the acquisition of these skills, especially the soft ones.

On the other hand, as previously said, Italy has developed only in 2018 an official list of soft-skills to be used in the National Qualifications Framework (NQF), aligned with the European one (EQF):

1. Concentration and interaction
2. Memory and participation
3. Cognition, collaboration and result orientation
4. Problem solving, cooperation and multitasking
5. Analysis and evaluation, effective technical communication respect and criticality management
6. Vision of synthesis, ability to negotiate and motivate, design capacity
7. Systemic vision, leadership, network management for complex social relationships and interactions, and planning
8. Strategic vision, creativity and projection and evolution skills.

Finally, as a bridge between HEIs and labour market, AlmaLaurea has developed some years ago a list of soft-skills relevant for university students entering a work environment, and asked to self assess the proficiency in each skill from 1 to 10.

In detail, according to AlmaLaurea the characteristics that the ideal candidate must have are:

- Autonomy, being able to perform the assigned tasks without constant supervision;
- Have self-confidence;
- Endurance, being able to react positively to work pressure, maintaining control in every situation;
- Precision, recruiters give great importance to attention to detail, preferring those candidates who demonstrate to be accurate and diligent; learning ability;
- commitment, to demonstrate to have will and perseverance to achieve the objectives indicated;
- manage information, ability to organize and reformulate data and knowledge acquired towards a defined objective;
- leadership, to demonstrate the ability to drag the team towards ambitious goals, gaining their trust;
- be enterprising, as recruiters tend to prefer candidates who show an innate spirit of initiative, knowing how to develop ideas and put them into practice;
- communication skills.

The soft-skills graduates are currently acquiring in national HE institutions: supply perspective. The Italian higher education system doesn’t offer at the moment shared
guidelines and methodologies for teaching soft-skills and train students to enter the labour market.

Indeed, each University – often even at course’s level – organises its own training activity for soft-skills and, as a result, offers its own vision about them. In this context, while the Ministry of Education and, especially, local authorities launched some centralised initiatives about soft-skills for schools (focusing also on the trainers’ requirements), nothing has been yet proposed for HEIs.

One of the most critical issues directly linked to the institutionalisation of soft-skills within the university system is the concrete difficulties in their evaluation. In fact, due to their “transformative” nature, soft-skills should be dynamic and employed in different contexts and – by definition – hard to measure.

Nonetheless, looking at HEIs perspective, it is possible at least to define some of the impacts that an institutional action on soft-skills should achieve:

- be valuable both for trainees and trainers;
- be fair and open;
- support a challenge-based approach;
- be meaningful for external stakeholders.

*How to measure and assess soft-skills in HEIs.* In this context characterised by a series of spot initiatives, in 2016 Fondazione CRUI launched an online survey involving 80 universities to detect some trend lines of Italian universities in promoting functional activities for the development of soft-skills in students.

The survey got 60 answers and it was built along 5 main areas of interest:

1. Activities dedicated to the development of transversal skills
2. Main types of 'transversal skills' on which these activities have focused
3. Ways of organizing these activities
4. Ways of developing these activities
5. Useful tips for creating a university organizational culture more permeable to the 'transversal skills' theme.

All the universities, apart from one, stated that in the last 2 years they have launched some actions for supporting the development of soft-skills, trying to match those skills internationally recognized to be strategic for the labour market.

The most recurrent skills developed have been:

- Critical thinking and problem solving (29,5%)
- Communication skills (both mother tongue and foreign languages) (18,7%)
- Digital skills (15,6%)
- Social and civic skills (11,4%)
- Skills for accessing the labour market (CVs, interviews) (9,5%)
- Learning (6,3%)
- Awareness and cultural self-expression (4,8%)
• Other (4,1%)

In terms of governance model for soft-skills, the survey highlighted that only the 40% of the universities manages this issue through a dedicated office at central level, while the 60% demands these activities to the autonomy will of decentralised structures.

Another important data emerging from the survey is that the majority of the universities participating to the survey were able to organize no more than 10 activities about soft-skills in the last two years and that the role of external stakeholders was crucial for their organizations.

Among the preferred formats to carry on these activities are included: workshops, seminars, meetings with experts and recruiters.

Finally, one of the major difficulties encountered by the universities towards the implementation of effective soft-skills strategies is the lack of activities for professors aimed at strengthening didactic innovation as only the 12% of the analysed group implemented activities of that kind.

This survey represents a very reliable scenario of soft-skills in Italian HEIs, whose main features could be summarized as follows:

• Lack of national initiatives and/or programmes for soft-skills;
• Lack of coordination among universities and flourishing of spot, self-organised actions;
• Perception of the strategic role that soft-skills play in terms of youth employability;
• Lack of assessment tools and methods for soft-skills.

Identification of the soft-skill shortages and imbalances. As already said, the impact of soft-skills initiatives in HEIs is hard to measure and to assess because there are no data available at central level but just (if available) at university one.

This is the first evidence that Italian HEIs, properly supported by the government, should do more to foster the uptake of a soft-skills unique strategy capable of producing real effects (and measures) in terms of students trained, skills definition and links established with the labour market.

Probably, one of the principal causes of the current situation is the low, and decreasing, public expenditure for the education system and especially for the University that easily translates into a low expenditure per students enrolled in tertiary education.

Even the current evaluation system for teaching and research, managed by ANVUR, doesn’t assign a specific value to this aspect in terms of extra-funding.
To this regard, OECD suggests that youth’s poor labour market outcomes is at least partially caused by a clear disconnection between the education system and the world of work as schools and universities often fail to teach soft-skills, which are currently very requested by hiring companies.

In fact, the OECD Survey of Adult Skills (PIAAC) shows that Italian workers, even the graduated ones, have low average levels of cognitive skills and are less likely to use certain cognitive skills required from the labour market.

The lack of resources and support also emerged from the aforementioned survey from Fondazione CRUI where the growing complexity and bureaucratization of the university system, together with the scarcity of financial and human resources as well as the absence of tools and methods for sharing practices and competences were addressed as the main factors hindering HEIs action towards soft-skills.

**Good practices in matching the requirements for graduates’ soft-skills and labour market demands.** The TECO (TEst on Skills) project has been developed by ANVUR through the construction of indicators that estimate the levels of skills of university students, with the aim of contributing to improving the quality of the training process by activating mechanisms within the academic world of self-evaluation.

TECO is therefore consistent with the most recent European guidelines (European Standards and Guidelines for Quality Assurance, 2015), relating to the European Higher Education Area - EHEA, which promote student-centered, accompanied teaching from the analysis of the learning outcomes.

TECO not only measures disciplinary skills, but also soft and transversal skills with a method based on Dublin descriptors (see Picture 2).

The transversal skills evaluated so far by Anvur are Literacy and Numeracy. For the 2019 surveys two new skills have been added: Civics and Problem Solving.
The working hypothesis is that these skills draw on a generalist training background and, as such, can also be formed in the course of university studies, guaranteeing comparable information between universities and / or study courses.

Literacy verifies students' levels of ability to understand, interpret and reflect on a text not directly attributable to subjects characterizing a specific Study Course or subject area, using two types of tests: a passage followed by 10 closed-ended questions and a short passage in which 20 words have been deleted that the student must re-enter, for a total of 30 questions.

Numeracy measures students' ability levels to understand and solve logical-quantitative problems, through a short passage with graphs and tables followed by 5 questions, an infographic followed by 5 questions and 15 short questions of logical reasoning, for a total of 25 questions.

The Literacy and Numeracy tests were carried out by the Agency with the collaboration of a group of experts, and were validated at the end of 2016 through a Field Trial which took place in five Universities.

In spring 2017 the final version of the Literacy and Numeracy tests was administered to 1759 students. At the end of the test, the students also responded to a Student Questionnaire, providing useful information on the family background and on personal, university and work experiences.

*Picture 2. TECO model for transversal skills*
Generalization of the main trends and requirements for the soft-skills at the national labour markets. According to OECD, the Italian stagnation period could be solved through a more effective human resource management that implements hiring procedures and allocation of staff based on skills needed in each job vacancy.

Similarly, a bigger effort on education and lifelong learning is needed to overcome the current dramatical Italian skills and soft-skills mismatch.

In fact, currently Italy has relatively few tertiary-educated workers and the inflow of new graduates to the labour market is relatively small. Only 20% of Italians aged between 25 and 34 years received a tertiary level education, with a negative enrolment rate from 2000 to 2015 and just a little positive start from 2016.

In addition, training on transversal skills at university level – as predictable from the outcomes of this report – results not to be valuable and effective as adult graduates in Italy have among the lowest average literacy and numeracy scores compared with tertiary graduates in other countries.

These are all among the reasons that brought to the set-up of a joint working group (OECD and Italian Government experts) aimed at building an Italian skills strategy that has been summarized in the “10 skills challenges for Italy” (see Picture 3).

**Picture 3. OECD 10 skills challenges for Italy**

**10 SKILLS CHALLENGES FOR ITALY**

- **Developing relevant skills**
  1. Equipping young people across the country with skills for further education and life
  2. Increasing access to tertiary education while improving quality and relevance of skills
  3. Boosting the skills of low-skilled adults

- **Enabling conditions for an effective skills system**
  4. Strengthening multilevel governance and partnerships to improve skills outcomes
  5. Promoting skills assessment and anticipation to reduce skills mismatches
  6. Investing to improve skills

- **Using skills effectively**
  7. Making better use of skills in the workplace
  8. Leveraging skills to promote innovation

- **Activating the supply of skills**
  9. Fostering the training and skills supply of all workers
  10. Encouraging the participation of women, youth and other underrepresented groups in the labour market

Source: OECD

Source: ANVUR
The data and information provided in this report, mainly based on evidences presented by international bodies, suggests that in Italy there is still a long path to reach an adequate level of awareness on soft-skills, both in HEIs and in the work environment.

Indeed, tertiary education should pay a pivotal role in reducing skills mismatch and creating a bridge between students and employers.

For sure, a bigger effort in terms of national coordination and support is required in order to cope with the “skills emergency” and to implement a series of System actions such as:

- improving the quality and relevance of skills acquired in tertiary education;
- increasing funding for tertiary education, linked to performance indicators based also on employability and skills’ acquisition outcomes;
- widening the training offer and the quality of professional tertiary education institutions (ITS);
- supporting a closer link between education and regional smart specialization strategies;
- fostering collaboration between universities and companies, thus offering work-based training opportunities.

LITHUANIA

Defining and classifying labour market soft-skills at the national context. In 2019 Lithuanian economy grew 3.8 % – almost double the European Union (EU) average. International migration indicators, which significantly improved in few past years, reduced the labour market tension, and wages growing faster than prices as well as favourable credit conditions ensured a strong domestic demand. The rise of the Lithuanian economy has improved the key indicators of the labour market in the year 2009-2019. The employment rate in Lithuania was 71.5 % and the unemployment rate - 6.3 % in 2019 - the lowest rate in the period of ten years. This was driven by rising demand for labour, an increase of wages and recent changes in the legal environment in labour issues, which allowed to employ new workers more flexible. However, the current situation in the Lithuanian labour market is significantly affected by labour shortages. Even though increasing labour shortages have been eased in the context of favourable migration trends and a more conservative assessment of demand for new workers, they continue to contribute to robust wage growth, also supported by government decisions to substantially raise wages for some public sector workers.

In year 2019 the growth of labour shortages was likely slightly dampened by higher immigration rates and lower emigration rates. Moreover, some companies were likely a little more cautious about their demand for new workers amid increasing risks to global

24
and EU economic growth. However, Lithuania’s indicators directly or indirectly related to hiring have not deteriorated significantly. Both the vacancy rate and confidence indicators are fairly stable, whereas the share of companies encountering a lack in orders or customers has slightly contracted. However, although rising at more moderate pace, labour shortages affect a considerable number of companies and constitute the main driver of rapid wage growth. These shortages are underpinned by the fall in the unemployment rate down to about 4% in large cities.

The world is changing extremely rapidly - the Fourth Industrial Revolution is shifting the business models and competitive environment, transforming market structures and creating a new demand for labour skills and abilities, which will play a crucial role in the future. According to the New Skills Agenda for Europe, the understanding of the soft-skills is mainly related to the ability and capacity to carry out processes and use the existing knowledge to achieve results; and the attitudes to describe the disposition and mind-sets to act or react to ideas, persons or situations. Besides the workplace, soft-skills are needed for personal fulfilment and development, social inclusion, sustainable lifestyle, successful life in peaceful societies, health-conscious life management and active citizenship. They are developed in a lifelong learning perspective through formal, non-formal and informal learning in all contexts, including family, school, workplace, neighbourhood and other communities.

The soft-skills in Lithuanian labour market are often called as social competences and mostly related to personal, social, learning to learn and communication competencies and abilities to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one’s own learning and career. It includes the ability to cope with uncertainty and complexity, to think clearly and rationally about what to do, to empathize and manage conflict in an inclusive and supportive context.

In addition to professional competences, the Lithuanian labour market is open to employees having well developed soft-skills. This is also illustrated by the results of the survey of talents’ search specialists in Lithuania, where even 92% of respondents agree that soft-skills are becoming more demanding. Most Lithuanian employers require a minimum professional experience, but in many cases, the ability to learn quickly, to show creativity and to demonstrate openness and willingness for changes is particularly crucial. It confirms, that Lithuania being an open and small economy has a fragmented labour market, which requires a diverse and wide range of employees having a high-level professional background in relation to soft-skills requirements.

According to the researchers, the soft-skills in the Lithuanian labour market have the same manner despite the qualification level of the human resources, professional requirements for the work position and type of industry/sector. Summarizing the researches and various surveys have done among the employers in Lithuania, the key soft-skills are following:

*Decision making in a complex environment.* This is the ability to solve unusual problems and make the decisions in a changing and challenging environment. Decision making
uses the relevant information to make choosing the best alternative easier and involves possibly assuming some risks in conditions of uncertainty.

*Creativity* or the ability to think and create creatively. Employees need to be more creative in order to adjust themselves to the work changes and benefit from new technologies or products or improve them. Creativity also involves adaptive thinking, i.e. the ability to think proactively, find unconventional, non-standard solutions and responses, and respond to unique and unpredictable circumstances.

*Emotional intelligence* is the ability to understand and manage one's emotions, motivation, social awareness and social skills. Employees with a high level of emotional intelligence have a strong motivation to work, are able to inspire others, become an effective part in different teams, are positive and constantly improve themselves. In the opinion of Lithuanian employers, it is one of the most important soft-skills in the labour market, because it is a crucial ability for communication with team, partners and consumers.

*Critical thinking* is the ability to analyse information objectively and make a reasoned judgment; in other words, it's directly related to logic and argumentation. Critical thinking in the workplace enables the employee to understand the logical connection between issues and foreseen the positive and negative aspects using various sources, such as data, facts, observable phenomena, and research findings.

*Teamwork/ effective collaboration* is an ability to be ready to work with others, to feel part of the team in order to achieve common goals in the most effective and efficient way. It involves sharing resources and knowledge, harmonizing interests and contributing actively to reach the objectives of the organization.

*Communication* is the ability to communicate effectively with colleagues and consumers by transmitting ideas, information and opinions clearly and convincingly both verbally and in writing, while listening and being receptive to the proposals of others.

**The soft-skills required by employers for local employees: demand perspective.** With the challenges of digitalization and artificial intelligence the new labour functions emerge, which partially or completely modify various groups of professions. That, in turn, changes the demand for competences and highlights the gap of skills. CEDEFOP Skills Forecast provides comprehensive information on future labour market trends in Europe. In 2019, CEDEFOP presented analysis on future labour market in European Union countries based on 32 billion work propositions. The results in general highlight the need for the following skills: *ability to adapt to changes*, *English language*, *teamwork*, and *computer skills*. It is noticeable that such soft-skills as *teamwork and communication with clients* are getting more important even for non-qualified workers.

The Research and Higher Education Monitoring and Analysis Centre (MOSTA) conducted the desk research of requested skills in online job vacancies in Lithuania. The analysis covered 163.5 thousands of online job vacancies available on CVbankas.lt portal in 2017–2018.
Most of job vacancies were posted in search for employees in the following categories: Industry and Manufacturing (13% of all vacancies), Trade and Consultancy (13%), and Customer Assistance and Services (11%).

*Higher education* was indicated as a requirement or advantage in 26% of vacancies analysed. However, a frequent vacancy with the requirement for education indicates the area (e.g. Economy) without the level of education. Almost half (13 out of 28) of the categories had higher education as a requirement or advantage in over 40% of job vacancies. Mostly, higher education was indicated in the following categories: Law (82%), Procurement/Supply (71%) Export (66%), Accounting/Finance/Audit (63%), and Insurance (62%).

*Work experience*, as a requirement or advantage was indicated in more than half (66%) of vacancies. Most often, this aspect was mentioned in the following categories: Export (90%), Leadership/Management (87%), Information Technology (84%), Energy/Electronics (82%), and Accounting/Finance/Audit (81%).

The most common features sought by employers were: responsibility, proactiveness, sociability, diligence, creativity, commitment to results, independence, and honesty. In more than half (17 out of 28) categories, responsibility, as a requirement or advantage, was indicated in more than a third of job vacancies.

The most common skills specified by employers in the job vacancies were: communication, teamwork, negotiation and computer skills. Some vacancies also specified specific programs or preferred programming languages. Even one third of Information technology online vacancies specified SQL skill, 27% - Java/JavaScript skill as a requirement or advantage.

The most common *foreign language* in job vacancies was English (33% of vacancies). Usually English language was specified in the following categories: Export (89%), Procurement/Supply (79%), Transport/Logistics Management (72%), and Law (71%). The second language most frequently specified in the vacancies was Russian (21% of vacancies). German, French, Polish, Italian, and knowledge of other languages was specified as the requirement or advantage less often.

Table 2 shows the distribution of the most common employer requirements in online job vacancies by categories (fragment).

<table>
<thead>
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<th>Sales management</th>
<th>Conversation skills (29%)</th>
<th>Computer skills (36%)</th>
<th>Negotiation skills (30%)</th>
<th>Education/ Training/ Culture</th>
<th>Conversation skills (31%)</th>
<th>Teamwork (26%)</th>
<th>English language (23%)</th>
<th>Ability to work with children (34%)</th>
<th>Higher education (36%)</th>
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<td>Honesty (23%)</td>
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<td>Digital tachograph/drivers card (11%)</td>
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<td>Work experience (55%)</td>
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In summary, the research showed that among Lithuanian employers the most preferable soft-skills are conversation skills, negotiation skills, teamwork, communicability, creativity, analytical thinking, independence, result oriented, planning skills, etc.

Similar results could be found in research made by “SkillSurvey”, presented for the Lithuanian employers and society in 2018. The findings show that young people entering the labour market need developing their communication skills. “The complex of soft and hard skills is crucial for every job candidate in the intense labour market nowadays. However, it is extremely important to labour market novice that do not have much experience. Soft-skills could be exactly the factor for the success.” – says Ray Bixler, the manager of “SkillSurvey” (Verslo žinios, 2018). According to him, labour market novices who are able to communicate both in written and verbal, explain the tasks and share information effectively, has an advantage against other candidates despite the job sector.

“SkillSurvey” analysed comments of employers about one thousand candidates who tried to get a job in a seven most popular sectors. The analysis of required soft-skills showed the following results:

- In service sector, the employers look for attention to details, ability to make decisions and clear communication;
- In finance sector the abilities to track new information, explain concepts and information and make informed decisions are the most important;
- IT sector employees should know how to document the creation of program and code. They should also be able to track the newest information and do multitasking (work with several projects at once);
- In nursing, the employers need people who demonstrate confidence in their skills, know how to instruct other people and are initiative.
- Business managers should possess good skills in information provision, negotiation and attention to details.
- Client project managers should know how to provide information in logical and persuasive way. Attention to details and endurance while facing the obstacles are also very important features.
- Engineers should be able to track the newest information and make decisions independently.

Soft-skills are important not only for young, but for elder employees as well. Because of the fast technological change, the practical skills of employees are growing old much faster than before. Therefore, the soft “human” skills become more important.

The demand of soft-skills in labour market in Lithuania closely corresponds to forecasts and reports of global organizations, like OECD, WEF, etc. According to World Economic Forum (2019), the most important skills of employees in 2020 are complex problem solving, critical thinking, creativity, people management, coordinating with others,
emotional intelligence, judgment and decision making, service orientation, negotiation, and cognitive flexibility. Similar trends are evident in Lithuanian labour market. If the professional experience of employee was the most valuable earlier, now it goes to the second plan. The personal features of the employee are brought into the centre of employers’ attention. Employees while performing their tasks should see the broader context and do not limit themselves to standard ways of problem solving; they should develop creative thinking. Those skills become more and more important in the context of 4.0-industry revolution. Soft-skills become necessary not only to people in services but in manufacturing as well. Employee who has not only technical but also personal skills as well, e.g., is able to communicate, convince others, showing leadership, is more valuable for the employers.

The soft-skills graduates are currently acquiring in national HE institutions: supply perspective. Knowledge, abilities and skills developed in higher education institutions in Lithuania are defined in accordance with international legal acts, agreements, as well as national laws, regulations, and other documents.

One of such documents is Qualifications Framework for the European Higher Education Area (QF-EHEA), which comprises the short cycle, the first cycle, the second cycle and the third cycle generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the short cycle, first and second cycles. Table 3 shows the qualifications for the first cycle, the second cycle generic descriptors for each cycle based on learning outcomes and competences.

**Table 3. Qualifications Framework for the European Higher Education Area (QF-EHEA)**

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Learning outcomes and competences</th>
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<tr>
<td>First cycle qualification</td>
<td>Qualifications that signify completion of the first cycle are awarded to students who:</td>
</tr>
<tr>
<td></td>
<td>• have demonstrated knowledge and understanding in a field of study that builds upon their generalsecondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</td>
</tr>
<tr>
<td></td>
<td>• can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</td>
</tr>
<tr>
<td></td>
<td>• have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;</td>
</tr>
<tr>
<td></td>
<td>• can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</td>
</tr>
<tr>
<td></td>
<td>• have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</td>
</tr>
</tbody>
</table>
Qualifications that signify completion of the second cycle are awarded to students who:

- have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;
- can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
- have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments;
- can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;
- have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

Source: EHEA Paris Communiqué Appendix III, 2018

The soft-skills evident in QF-EHEA, like problem solving, communication, self-learning, and decision-making, are developed in Lithuanian HEI.

Another cornerstone National document used by higher education institutions to develop new or existing programs in a particular field of study is Study Field Descriptor. It provides basic guidance on how to shape or improve study outcomes in study programs, describes study areas, and defines study program delivery requirements. The descriptors are also used by experts of Lithuanian and foreign countries who evaluate study programs. The descriptors complement the hierarchical structure of learning outcomes characteristic of studies in Lithuania - the Descriptor of the Lithuanian Qualifications Framework approved by the Government of the Republic of Lithuania and the study cycle descriptors approved by the Minister of Education and Science.

Descriptors of different study fields indicate the knowledge and skills developed in the study programs of a certain study cycle in a particular study field. Although the competences provided in the descriptors of different study fields differ, many of them distinguish between groups of social and personal skills, which essentially include so-called “soft” competences. For example, social skills include the ability to communicate by conveying professional knowledge to colleagues, to take responsibility for the quality of one’s own and the team’s performance; ability to communicate effectively in writing and orally, discuss and work in teams; organize teamwork; evaluate the effectiveness of teamwork, etc. Personal skills include the ability to critically evaluate one’s own and colleagues’ work; awareness of moral responsibility; the ability to take responsibility for your own development; the ability to learn, make creative and innovative decisions, etc.
An example of soft-skills that are usually described in a Study Field Descriptor is provided in Table 4, using the Descriptor of the Study Field of Economics for illustration.

Table 4. Social and personal skills that students of first cycle and second cycle should acquire in Lithuanian HEI in the Study Field of Economics

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Learning outcomes and competences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social abilities</strong></td>
<td></td>
</tr>
<tr>
<td><strong>First cycle university studies qualification</strong></td>
<td></td>
</tr>
<tr>
<td>- Ability to communicate and cooperate efficiently with specialists and the public in dealing with the tasks related to professional activities or the study field, convey economic knowledge and understanding orally and in writing to specialists, present completed activities and their results to different audiences, participate in discussions on relevant professional issues in the professional and inter-disciplinary environment;</td>
<td></td>
</tr>
<tr>
<td>- Ability to express thoughts fluently and convincingly orally and in writing in Lithuanian and at least one foreign language, communicate efficiently in the professional environment and community;</td>
<td></td>
</tr>
<tr>
<td>- Ability to take responsibility for the quality of their and their subordinate employees’ activities and its assessment by adhering to the principles of professional ethics and citizenship as well as social responsibility.</td>
<td></td>
</tr>
<tr>
<td><strong>Personal abilities</strong></td>
<td></td>
</tr>
<tr>
<td>- Ability to assess their and their colleagues’ professional practice critically, understand moral responsibility for the impact of their activities and results thereof on social, economic and cultural development, welfare and environment;</td>
<td></td>
</tr>
<tr>
<td>- Ability to take responsibility for continuous formal and non-formal learning and professional development;</td>
<td></td>
</tr>
<tr>
<td>- Ability to take decisions independently in a complicated situation, improve learning skills constantly, plan the learning process.</td>
<td></td>
</tr>
<tr>
<td><strong>Social abilities</strong></td>
<td></td>
</tr>
<tr>
<td>- Ability to communicate efficiently, fluently and convincingly in writing and orally at least in one foreign language with economists and other stakeholders, participate in discussions on relevant practical and theoretical economic matters, including presentation of ideas, drafting of business reports, consultations and expert evaluation;</td>
<td></td>
</tr>
<tr>
<td>- Ability to organise and conduct research individually and in teams as well as an interdisciplinary team, assess the team’s performance efficiency, analyse the principles of team composition, delegation of tasks and management by adhering to the principles of professional ethics and citizenship both in the national and international context;</td>
<td></td>
</tr>
</tbody>
</table>
Second cycle qualification

- Ability to organise drafting of action plans and projects independently, lead their implementation, evaluate efficiency of these activities.

Personal abilities

- Ability to make independent decisions in complicated and uncertain situations;
- Ability to initiate professional activities independently and lead them, select the area of improvement and engage in continuous independent improvement;
- Ability to demonstrate the skills of critical, systematic and strategic thinking by making innovative decisions based on the evaluation of possibilities and consequences, understand moral and social responsibility for their activities and ethical consequences thereof;
- Ability to assess critically and select national and international information sources that are the most suitable for use, ensure confidentiality of information.

Source: Centre for Quality Assessment in Higher Education

Example provided in Table 4 shows, that the main soft-skills graduates are currently acquiring in Lithuanian HE institutions include communication, cooperation, responsibility, self-learning, teamwork, decision-making, work planning, critical thinking, etc.

Identification of the soft-skill shortages and imbalances. OECD collects the official information about employment and skills needed for labour market in different countries. Changes in the demand for and supply of skills are creating skills imbalances, including shortages, surpluses and mismatches. The Skills for Jobs database provides information on the type of skills facing imbalances and their intensity.

Skill shortages occur when the skills sought by employers are not available in the pool of potential recruits, whereas skills surpluses occur when the supply of certain skills is higher than the demand for them. The OECD Skill Needs Indicators measure the degree of shortage (positive values) and surplus (negative values) for a range of dimensions, such as skills, abilities and knowledge.

The situation in Lithuania could be seen in the figures provided below.

Figure 4. Abilities needs in Lithuania
The shortage in abilities in most countries occurs mainly for cognitive abilities, as well as auditory and speech abilities. Surpluses are mainly found for physical (e.g. endurance, physical strength) and psychomotor (e.g. fine manipulation, control movement) abilities.

Skill shortages are concentrated among content skills (e.g. reading comprehension, writing, speaking and active listening), process skills (e.g. critical thinking and active learning), complex problem solving skills and social skills (e.g. instructing, social perceptiveness). Surpluses are more common for technical skills, such as equipment maintenance and repairing.

According to OECD data, the biggest shortage is in systems skills (systems evaluation, systems analysis, judgement and decision-making), complex problem solving skills, basic process skills (critical thinking, monitoring, active learning, learning strategies) and basic content skills. Time management is among competences in need. The shortage also exists with social skills such as persuasion, negotiation, instructing, social perceptiveness, coordination and service orientation.

A systematic approach to skills anticipation is under development in Lithuania with the aim of reducing the mismatch between the skills gained through education and training and those in demand in the labour market. The Ministry of Education and Science, Ministry of Social Security and Labour and the Ministry of Economy together with the Research and Higher Education Monitoring and Analysis Centre (MOSTA) are responsible for skills anticipation. The government is also establishing a National Human Resources Monitoring (NHRM) system incorporating labour market forecasts and a wide range of data that give an indication of the current demand for skills. The NHRM will provide a detailed assessment of skills needs by occupation and qualification.
Short-term forecasting is undertaken by the Lithuanian Labour Exchange. This provides a forecast of skills demand one year ahead. This feeds into the Skills Barometer that gives a regular update on the skills most in demand. Efforts are being made to improve the country’s longer-term skills forecasting capability.

The dissemination of skills anticipation results takes place through policymakers, government ministries, researchers, and public websites, etc. Target audiences include the general public through guidance counsellors, local public employment services (PESs), higher education and vocational education institutions, as well as the social partners.

Stakeholders such as trade unions and employers are involved in several of the bodies that have a role in skills anticipation. The role of stakeholders, primarily educational and VET institutions, unions and employers is also important mainly through translating information from skills anticipation activities into standards and learning outcomes in higher education and VET, as well as influencing the relevance of government policy and
legislation. It is apparent that in the higher education sector that skills anticipation data is of importance when developing new courses.

**Good practices in matching the requirements for graduates' soft-skills and labour market demands.** The main initiatives and sources for good practices in matching the requirements for graduates' soft-skills and labour market demands mainly are initiated by universities and public institutions in Lithuania. Kaunas University of Technology has a few successful initiatives to ensure better integration of professional and soft-skills are the following:

**MA+ master’s studies model.** This unique in Lithuania model of MA+ focuses on broader studies, which help building competitive competences creating added value in the global job market. MA+ master’s studies model allows the students to design their studies themselves by choosing additional competencies’ packages next to their major studies. At the moment, the most popular among students are the competence packages, which are based on the development of the soft-skills of graduates, i.e. leadership, project management and languages competence packages. All the 22 competence packages offered by KTU are being developed in collaboration with business companies.

**GIFTed programme.** It is a talent development platform providing all the possibilities for the talented students of KTU to improve and realise their abilities in science and business areas by participating in the “Challenge” activities. The students work with career mentors — professionals in the business sector of chosen study field. Students learn about their professional area with the help of 20 career mentors selected according to their professional recognition, social activities and scientific achievements. Students participate in the programme “7 Habits of Highly Effective People” for personal development and emotional intelligence development.

**GUIDed programme.** Mentorship is a programme aiming to develop intelligence in a broader context, to transfer available knowledge and soft-skills to facilitate integration in a new academic, socio-cultural environment. The persons who have had a mentor in their life adapt more quickly and successfully, their achievements are higher and they do not repeat the same mistakes. Mentorship provides students with a possibility to have their personal teacher and role model who cares about the student’s achievements, who can listen, teach the student to learn more efficiently, think critically and creatively, give advice, and help to develop the competencies required for the student’s career.

**WANTed programme.** Become “WANTed” in the labour market by developing marketable and soft-skills. It provides possibilities for students’ personal and professional development. “WANTed” programme is a great possibility to develop the career competencies, plan studies with focus and purpose, and relate them to future career. Students has an opportunity to participate in the events, seminars, receive consultations on the career issues, and look through the job and internship offers.

**DIGITAL BADGES.** Non-formal education: digital badges for acknowledgment of the activities of the development of competences. Digital badges are digital micro-
certificates; it is a new digital standard for acknowledgment of the non-formal learning and education achievements. With the graduation diploma students get personal Portfolio of Competencies. The badges are a visual record of experience and achievements. Student could be awarded three types of certificates:

- A file of competences - It is a summary of your activities provided in accordance with 7 types of activities (volunteering; additional and volunteer internship; membership of KTU organisation; additional education (learning) at KTU; research activities; transfer of knowledge and experience; achievements at the Olympiads and competitions and contests). A certificate reflects participation in various activities.
- Certificate of participation in the programme - A certificate reflects participation in the activities of a particular project. Student involvement and activeness in various programmes is important.
- Certificate of participation in accordance with the types of activities – student can choose particular activities currently relevant to her/him and receive a certificate with a consistent representation of participation in these activities.

Generalization of the main trends and requirements for the soft-skills at the national labour markets. The future Lithuania’s economic situation and the tendencies of the labour market will depend on the effects of COVID-19. Now it is already clear that the Lithuanian economy will be shaken, but the extent of the economic consequences will depend on how quickly the pandemic will be spread and what measures will be taken. According to the Bank of Lithuania, the GDP may shrink from 3.4 % (optimistic scenario) till 20.8 % (pessimistic scenario). However, the investment cycle has peaked in 2019 and is therefore expected to contribute less to growth. Decelerating exports are also set to lower their contribution to growth. Weaker than expected euro area growth could damp growth prospects, while Brexit may lower emigrants’ remittances. A faster than expected rise in unit labour costs could harm competitiveness.

The pandemic situation will affect the national labour market as well. According to the forecast, the unemployment level may decrease from till 16 %, and the average wage may drop to 12.2 % in year 2020. The pace of recovery of the Lithuanian labour market indicators will depend on the level of changes in domestic demand as well as on household consumption and investment. Anyway, this economic situation and possible changes in the labour market will not affect substantially the qualitative part of the labour market, i.e. the soft-skills of current and future employees in Lithuania.

From the demand perspective, Lithuanian employers mostly prefer soft-skills like complex problem solving, negotiation skills, teamwork, communicability, emotional intelligence, creativity, analytical and critical thinking, decision making and result oriented, planning skills, etc. It is obvious that the personal and social features of the employee are brought into the centre of employers’ attention and the professional experience of an employee goes to the second plan. With a challenges of digitalization and technological changes, the employees must see the broader view and do not limit themselves to standard ways of problem-solving; they should develop creative thinking, able to communicate and convince others, showing leadership.
From the supply perspective, the majority of HEI in Lithuania integrates into their study programs the soft-skills, which mainly are named as social and personal skills, i.e. communication, cooperation, responsibility, self-learning, teamwork, decision-making, work planning, critical thinking. This leads to the assumption that soft-skills are successfully acquired and applied in the labour market although the employers are still missing the appropriate level of soft-skills in Lithuanian labour market.

Despite a reasonable supply of soft-skills provided by HEI, the OECD research revealed the obvious shortages of soft-skills among employees in Lithuania. The shortages are concentrated among content skills (i.e. reading comprehension, writing, speaking, and active listening), process skills (i.e. critical thinking and active learning), complex problem-solving skills and social skills (i.e. instructing, social perceptiveness), etc.

From the governmental view, the skills forecasting system is starting to develop in Lithuania as a problem of the mismatch between demand and supply of skills (including soft-skills) is still exists. Lithuanian governmental institutions with various stakeholders making many efforts for the successful improving the Lithuanian longer-term skills forecasting capability and integration of them into the new study programmes and courses of HEI. The importance of soft-skills is obvious as they are valuable and highly demanding elements in the entire Lithuanian skills system.

ROMANIA

Defining and classifying labour market soft-skills at the national context. The economy of Romania is a fast developing, upper middle-income mixed economy with a very high Human Development Index and a skilled labour force, ranked 15th in the European Union by total nominal GDP and 10th largest when adjusted by purchasing power parity. Romania's economy ranks 40th in the world, with a $516.5 billion annual output (PPP). In recent years, Romania enjoyed some of the highest growth rates in the EU: 6% in 2016, 7.1% in 2017, and 4.4% in 2018. Growth is expected to slow down to +3.8% in 2019.

Labour market structure. According to data provided by the National Institute of Statistics (INS), Romania has a resident population of 19.52 million inhabitants with an active civilian population amounted to 8.717.900 persons, representing 44.7% of the resident population. Out of the total active population, 54.7% were men and 45.3% were women.

The employed civilian population amounted to 8.366.800 people, of whom 5.362.300 were salaried employees. Most of the employees were working in the services sector (3.333.500 people), while 1.900.200 persons were employed in the industrial and construction sectors. The number of employees in agriculture, forestry and fisheries was 128.600. In 2018, the employment rate of the working age population (15-64 years old) was 64.8%, with a higher rate for men (73.2%, compared to 56.2% for women).
Following the decline over the period 2011-16, the employment levels in Romania are slowly increasing from 2016 and are expected to keep this trend from 2019 onwards, as shown in Figure 6.

**Figure 6. Percentage employment growth in Romania and the EU-28, 2011-2030**

![Percentage employment growth chart](chart)

Source: Cedefop (2018 Skills Forecast)

In terms of employment growth in Romania some sectors are expected to grow throughout the forecast period and others to shrink - the highest increase during the period 2016-2021 is expected in the business and other services sector, while during the period 2021-30 it will be in the non-marketed services sector. At the level of sub-sectors, health and social work, other business services and education are the sectors where the highest increase in employment is expected (see Figure 7).

**Figure 7: Employment growth by broad sector of economic activity, 2011-30**
Economic challenges addressed. In the last period, Romanian economy showed a significant improvement of its macroeconomic stability that lead, in the condition of a fast GDP increase, to a significant financial sustainability and public debt corelated to a better institutional convergence with other EU member states.

Nevertheless, even within a favorable macroeconomic environment, in 2017 and especially in 2018 several challenges related to the maintenance of the economic and financial stability occurred that might transform in threats for the labour market, if not properly addressed.

The main challenges and risks that labour market are facing are as follows:
- High emigration level / braindrain;
- Low performance level of the national education system;
- High level of black/gray labour market;
- Evolution of the demographic structure;
- Low impact of the public policies related to labour market;
- Cumbersome administrative procedures and many difficulties for accessing labour market of disadvantaged groups of population;
- Low level of social partners’ involvement.

Challenges of graduates to be hired. Accordingly to the Cedefop Skills Panorama, Romania is ranked as 26 out of 30 in EU, having the lowest score for the Skills Development pillar of European Skills Index in 2020. The main challenges that the graduates are facing are linked to the high mismatch between the education system provision and the labour market demands and trends. Recent studies showed that out of a population of 4.875.656 youngsters aged between 15 and 34 years old:

- Lack of practical professional experience acquired during their studies - only 1,2% worked during their studies;
• 25.4% are not having the employee status;
• Low level of matching between the level of diploma obtained and actual working place skills level - only in 44.1% of cases the training level and the requirements of the working place are highly matching, for 35.3% are matching average, for 13.6% low and for 7.1% are not at all;
• Over 30% of the HE graduates have jobs that in fact are requiring just high school diploma.

The soft-skills required by employers for local employees: demand perspective. Summarizing the outcomes of a survey done at national level, within the 200 employers attending “TOP Employers” events, the 10 most required within the recruitment of staff by the HR experts are as follows:

- Teamwork - 52%
- Focus on clients / Service orientation - 50%
- Continuation acquisition of knowledge - 39%
- Proactivity - 37%
- Effective communication skills - 35%
- Adaptability - 30%
- Solving complex problems - 24%
- Planning and effective organisation - 24%
- Emotional intelligence - 20%

While the 10 less desired are as follows:

- Creativity - 17%
- Critical thinking - 15%
- Capacity to analyse information - 13%
- Team management - 11%
- Autonomous work - 11%
- Negotiation - 11%
- Curiosity - 11%
- Time and priorities management - 11%
- Ability to convince you audience - 2%

The soft-skills graduates are currently acquiring in national HE institutions: supply perspective. Soft-skills are present within the Qualification Framework in Higher Education regulatory acts as “transversal competencies” and detailed as:

- Teamwork;
- Effective communication and cooperation;
- Communication (orally and in writing in mother language and foreign languages);
- Problem solving and decision making;
- Autonomous learning;
- Critical thinking;
- Creativity and open-mindedness;
- Openness towards continuing acquisition of knowledge (lifelong learning);
• Professional ethics and responsibility;
• Social responsibility and citizenship.

Even the soft-skills are present within all the qualification frameworks for HE study programmes, there are few activities/events organized especially for their development. Common practice is that soft-skills are acquired through non-formal learning in interaction with colleagues and teachers.

Identification of the soft skill shortages and imbalances. According to the OECD Skills for Jobs findings “In Romania, Quantitative, Verbal and Reasoning Abilities show intense shortages. Shortages in the Skills areas of System Evaluation and System Analysis are also high, and stronger than that of the average across the OECD. Romania also faces shortages in most Knowledge areas, especially for Mathematics Knowledge and Computers and Electronics, which both have stronger shortages than across the OECD.” The mismatch in terms of Abilities, Skills and Knowledge are summarized in Figures 8-10.

Figure 8: Abilities mismatch in Romania

Source: OECD, 2018
The OECD Skill Needs Indicators measure the degree of shortage (positive values) and surpluses (negative values) for a range of dimensions, such as Skills, Abilities, and Knowledge areas. Results are presented on a scale that ranges between -1 and +1. According to Cedefop, in Romania 6 out of 10 jobs facing skill shortage are in occupations requiring medium skills. About 35% of jobs that are hard-to-fill are in occupations requiring high-skills while 7% are in jobs requiring low-skills.

At national level, one main initiative to address the skills mismatch supported by many of the stakeholders involved explores new ways for Higher Education Institutions to offer study programmes at initial as well as at continuing professional development level, through project-based learning, service-learning and project-based dual learning methods, correlated with internships and practical stages within socio-economical actors in order to address the rapidly changing knowledge, skills and competence needs of the labour market strengthening this way long-term collaboration between education and socio-economic environment.
Good practices in matching the requirements for graduates’ soft-skills and labour market demands. The review of the existing resources showed no specific actions towards matching the requirements for graduates’ soft-skills and labour market demands – most of the these skills are acquired informally within the existing educational activities, especially the ones embedding learning methodologies that imply working in a real working environment within a real company or other type of socio-economic entity.

The shortage of soft-skills training provision within higher education is compensated by the existence of a wide range of training offers coming from private training institutions that build their business to fill this gap.

Generalization of the main trends and requirements for the soft-skills at the national labour markets. Considering that the negative impact of net migration level will continue to manifest in the next years, the total Romanian population is envisaged to decrease to 19.2 mln. in 2020, to 18 mln. in 2030, to 16.3 mln. in 2050 and to approximate 15 mln. in 2070. An estimation of the population evolution is presented in Figure 11 based on the data provided within “Romania. Country fiche for the Ageing Report 2018”.

![Figure 11. Evolution of Romanian population](image)


Most jobs will come from the need to replace workers retiring or changing occupations as in most of the EU countries. According to Cedefop, “employment growth can be explained by three possible drivers: (a) overall trends of the economy (i.e. growth or
decline), (b) shifts of employment between sectors and (c) changes in the occupational structure within sectors (i.e. factors making some occupations more important/others)“.

Presently, there is no reference available related to soft-skills need main trends and requirements specific to Romania – these matters are envisaged to be aligned within the national regulations and practice with the EU and international trends.

**SPAIN**

**Defining and classifying labour market soft-skills at the national context.** Spain has a total population 47,100,396. The GDP figure in 2019 was $1,8 million. As a table 2 shows, the unemployment rate in the 4th quarter of 2019 was of 13.78% (Data from INE).

**Table 2. Evolution of labour force, employees, unemployed and unemployment rate in the fourth quarter of 2008 to 2018**

<table>
<thead>
<tr>
<th>Year</th>
<th>Labour force</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Unemployment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>222659.9</td>
<td>20717.9</td>
<td>1942</td>
<td>8.57</td>
</tr>
<tr>
<td>2008</td>
<td>23262.4</td>
<td>20055.3</td>
<td>3206.8</td>
<td>13.79</td>
</tr>
<tr>
<td>2009</td>
<td>23225.4</td>
<td>18890.4</td>
<td>4335</td>
<td>18.66</td>
</tr>
<tr>
<td>2010</td>
<td>23377.1</td>
<td>18135</td>
<td>4702.2</td>
<td>20.11</td>
</tr>
<tr>
<td>2011</td>
<td>23440.3</td>
<td>17399.4</td>
<td>5287.3</td>
<td>22.56</td>
</tr>
<tr>
<td>2012</td>
<td>23360.4</td>
<td>17135.2</td>
<td>6021</td>
<td>25.77</td>
</tr>
<tr>
<td>2013</td>
<td>23070.9</td>
<td>17569.1</td>
<td>5935.6</td>
<td>25.73</td>
</tr>
<tr>
<td>2014</td>
<td>23026.8</td>
<td>18094.2</td>
<td>5457.7</td>
<td>23.7</td>
</tr>
<tr>
<td>2015</td>
<td>22873.7</td>
<td>18508.1</td>
<td>4779.5</td>
<td>20.9</td>
</tr>
<tr>
<td>2016</td>
<td>22745.9</td>
<td>18998.4</td>
<td>4237.8</td>
<td>18.63</td>
</tr>
<tr>
<td>2017</td>
<td>22765</td>
<td>19564.6</td>
<td>3766.7</td>
<td>16.55</td>
</tr>
<tr>
<td>2018</td>
<td>22868.8</td>
<td>3304.3</td>
<td></td>
<td>14.45</td>
</tr>
</tbody>
</table>

Source: Observatorio de las Ocupaciones SEPE from Statistics National Institute (INE)

- Economic growth influences the demand for skills, and in Spain, the economy grew as a result of supportive monetary policy, low oil prices, fiscal stimulus and the depreciation of the euro. As a result, unemployment has started to
decline, though it remains very high (14.425% in 2018), especially for youth and the low-skilled, and long-term unemployment has not yet declined (OECD, 2017).

- Labour productivity, which is closely related to how well skills are allocated in the workplaces, has grown quite a bit in recent years to reach the OECD averages.
- Spain’s economy is more geared towards lower-skilled labour than other European countries. While the share of employed workers in high-skill occupations is rising, Spain still employs a higher share of workers in low-skill occupations.

The skills of tertiary graduates are highly valued in Spain. However, not all credentials are rewarded equally: skills matter. Even among individuals with a common credential, earnings and employment vary greatly based on the actual skills possessed by those individuals (Figure 13). In Spain, as in other OECD countries, tertiary graduates with higher levels of skills – as measured by literacy and numeracy – are more likely earn more and to be employed than tertiary graduates with lower levels of skills (OECD, 2015).

Field of study choices may be sub-optimal from the perspective of firms (OECD, 2015). At the university level, the rewards have been particularly strong for engineering graduates, but have also been high for graduates in health and welfare, the physical and life sciences, and social sciences.

Figure 13. Employment rate for tertiary graduates aged 25-64 by literacy proficiency level. PIAAC 2012

Source: OECD calculations based on the OECD (2012), Survey of Adult Skills (PIAAC) (database).

www.oecd.org/site/piaac/surveyofadultskills.htm

At the university level, the rewards have been particularly strong for engineering graduates, but have also been high for graduates in health and welfare, the physical and life sciences, and social sciences.

Figure 14. Wage premium for university graduates relative to upper secondary graduates by field of education in Spain, 2006-2013.
Funding formulas in Spain are driven by student enrolment and provide few incentives to make universities responsive to changing labour market needs. For instance, apparition of code academies is proof that the training system is not responding to digital competence needs (as with English academies at the moment). Code academies are the means of the private sector to upgrade the digital skills needed by the labor market, and that the education sector is not currently covering.

The most comprehensive agenda regarding new skills has been, so far, the Bologna process, that has had two main results: the development of the National Qualification Framework and the definition, for each HE program, of their general competencies (soft-skills) as well as their specific competencies (hard skills).

National qualifications frameworks (NQFs) classify qualifications by level, based on learning outcomes. Since they cover the whole range of degrees of the same level (all Bachelors, all Masters Programs, all PhDs), they are written in transversal skills that differ in the level of achievement. The skills defined by the Catalan Higher Education Qualification Framework (CHE-QF) are the following: cognitive, creative, problem-solving, technical and practical skills, and information/communication.

Table 3 explains how the external quality agencies assess whether the skills are well defined and if they are of the appropriate level.

The soft-skills required by employers for local employees: demand perspective. There are 3 ways of acquiring information regarding the soft-skills needs of enterprises:

1. Analysing the competences that appear in the job advertisements:

There are a few experiences where data of job ads published on the web are analysed in order to use this information in decision-making and multidimensional analysis (type of occupation, skill, sector, etc.). For instance, in Spain, there is the Wollybi Basque
Talent, or the Employment map from Fundación Telefónica. And in Europe we can find the CEDEFOP Skills Online Vacancy analysis tool.

2. Asking employers what soft-skills they do need: employer surveys. For instance, IVIE (2019), or AQU (2014),

Table 3. Evaluation procedures and standards (CHE-QF)

<table>
<thead>
<tr>
<th>EVALUATION PROCEDURES</th>
<th>EVALUATION STANDARDS</th>
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<tbody>
<tr>
<td>Validation (ex-ante accreditation)</td>
<td>The institution has formulated in a clear and appropriate way the programme competencies (i.e. language and structure). The profile of competencies (general and specific) is appropriate both to the disciplinary content of the title and the required level in the NQF.</td>
</tr>
<tr>
<td>Accreditation</td>
<td>Training activities are consistent with the intended learning outcomes. The evaluation system allows a reliable certification of learning outcomes and is public. Academic indicators are suitable for the characteristics of the program. Employability indicators are suitable for the characteristics of the program.</td>
</tr>
</tbody>
</table>

3. Asking graduates what soft-skills are needed in their job: graduate surveys. Three Spanish Autonomous Communities carry out periodically graduate surveys:

- Catalonia, through AQU Catalunya
- Aside from Catalonia, there are two other regions (Autonomous Communities) in Spain, where studies have been carried out on the employment outcomes of the graduate population:
  - Galicia, through the Galician QA Agency (ACSUG)
  - Basque Country, through LANBIBE

Table 4 shows the relevance that employers and human resources managers give to different set of competences according to IVIE report (2019).

Table 4. Employability skills more relevant for employers
The recruitment factors assessed most highly by employers recruiting graduates were, on a scale from 0 to 10, a degree from a foreign university (6.6), work experience/placement (6.5), stays abroad (6.4) and the university’s standing (5.5) (AQU, 2015).

42% of employers recruiting graduates experienced difficulties in recruitment, the main reasons being a shortage of applicants with the necessary skills (60%); a shortage of

<table>
<thead>
<tr>
<th>Instrumental skills</th>
<th>Mean</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>Oral communication skills</td>
<td>8.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Computer knowledge</td>
<td>7.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Written communication skills</td>
<td>7.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Ability to understand and express yourself in English</td>
<td>7.3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social and interpersonal skills</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social skills for working in teams and collaborate effectively with other people</td>
<td>8.7</td>
<td>1</td>
</tr>
<tr>
<td>Social skills to relate to other people</td>
<td>8.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Empathy, ability to listen</td>
<td>8.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Ability to manage one’s own emotions and moods</td>
<td>7.7</td>
<td>1.5</td>
</tr>
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<table>
<thead>
<tr>
<th>Cognitive skills</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Capacity for problem solving</td>
<td>8.4</td>
<td>1</td>
</tr>
<tr>
<td>Creativity and innovation (ability to contribute, develop and implement new ideas and concepts)</td>
<td>7.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Analysis capacity</td>
<td>7.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Critical reasoning</td>
<td>7.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Negotiation and conflict resolution skills</td>
<td>7.7</td>
<td>1.6</td>
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<tr>
<th>Working planning and result orientation</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality orientation, interest in doing good things</td>
<td>8.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Focusing on the achievement of objectives</td>
<td>8.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Efficiency in planning and management of time and resources</td>
<td>7.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Ability to delegate tasks</td>
<td>7.3</td>
<td>1.8</td>
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<thead>
<tr>
<th>Systemic competences and self-determination</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative, proactivity</td>
<td>8.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Adaptation to the road, flexibility, ability to adapt to new situations</td>
<td>8.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Ability to take responsibility and make decisions</td>
<td>8.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Stress tolerance, pressure management</td>
<td>8.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Leadership, ability to lead other people or groups</td>
<td>7.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Self-criticism, to be able to value one’s own performance</td>
<td>7.9</td>
<td>1.4</td>
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<thead>
<tr>
<th>Values and motivational aspects</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical commitment</td>
<td>8.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Culture of effort, tenacity and motivation of work</td>
<td>8.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Interest of learn, desire to improve</td>
<td>8.5</td>
<td>1.3</td>
</tr>
</tbody>
</table>

graduates in a given field (30%); and a shortage of applicants willing to accept the salary being offered (20%).

The analysis by sector is interesting because sectors have similar areas of employment and similar skills’ needs are encompassed. The sectorial employer survey, carried out by AQU Catalunya in 2018, shows that the needs of soft-skills can vary largely between sectors. For instance, in Pharmacy: employers identify a high shortage in the graduates referred to the ability to provide therapeutic advice in drug therapy and diet therapy (75.8%). On the other hand, in Economics and Business Administration: employers identify deficiencies in practical training, problem-solving and decision-making, customer focus, management of complexity and uncertainty, and commercial skills.

The soft-skills graduates are currently acquiring in national HE institutions: supply perspective. Higher Education Institutions should define soft-skills for each Study programme, called “Competencias transversales”. Some HEIs define a set of soft-skills that have to be applied to all the programmes delivered by the Institution.

Moreover, the soft-skills defined by HEIs must include a set of soft-skills provided by the Spanish Qualifications Framework (MECES), called “Competencias básicas” or “Basic competences”. MECES establishes a set of basic competencies for each level (bachelor, master and PhD).

There is a lack of general strategy apart from the Bologna process aforementioned. OECD (OECD, 2015) points to the following measures, but so far, no clear policies implemented:

- Better linkages between tertiary institutions and employers would improve the labour market relevance of programmes
- Increased mobility between university and the private sector could improve the quality and relevance of skills developed in tertiary education
- Better information about the labour market outcomes of graduates of different institutions and fields of study could help to improve quality and the alignment between the skills supply and demand
- But information alone is insufficient. Youth need guidance to interpret learning and labour market information
- Availability of information on labour market outcomes by field of study is improving, but there continues to be room for improvement

Apart from what it is commented above, there is a legal requirement for all graduates in Catalan universities to demonstrate that they acquired the level B2 of foreign language on the Common European Framework of Reference for Languages (CEFR).

Each university organize courses and seminars to training the teaching staff in soft-skills. New teacher programs are also offered to introduce new teachers to competency-based learning and teaching innovation. Each university design its own training activities regarding soft-skills.
Since the Bologna process, most programs have set up internships. For instance, in Catalonia 50.3% of Bachelor programs have mandatory practices (internships). Dual vocational training is also present in some autonomous communities such as Basque Country and initially in Catalonia.

**Identification of the soft-skill shortages and imbalances.** The OECD’s Skills for Jobs database offers an assessment of skills in shortage and surplus which relies upon quantitative information about employment, wage and talent pressure -rather than subjective reports. For Spain, surpluses are evident in knowledge related to manufacturing and production, as well evident in basic skills and abilities related to numeracy and literacy, as well as higher-level cognitive skills and abilities, like reasoning, systems skills and complex problem solving. Shortages are also evident in education and training, science, technology, engineering and mathematics (STEM) fields, business and management, and communications. Spain faces particularly large shortages in knowledge of computers and electronics, which reflects relatively low digital skills by international comparison.

In Catalonia (AQU, 2017), as the figure 15 shows, the greatest difference between the level of education provided and the level needed for work is still in languages. IT, decision-making, leadership and management are also cross-disciplinary skills that show shortcomings when it comes to the labour market.

*Figure 15. Education shortfall: difference between the assessment of the level of education provided in the study programme and its usefulness in work (only for graduates performing level-functions)*
As has been said, the very broad range of programmes offered at institutions, funding formulae and governance structures do not provide incentives to align course offerings and curricula with the needs of the labour market, and a lack of detailed learning and labour market information tailored to the needs of prospective students.

According to a Valencian Institute of Economic Research’s study, employers consider the education system does not respond completely satisfactorily to the demands. They identify the following deficiencies:

- Shortage of personal and professional skills of a cross-cutting nature.
- They find candidates well prepared in technical matters, in basic knowledge, but it is difficult for them to present the required competences and skills.
- The graduates present a generalised lack of knowledge regarding companies, their operation and their real needs.
- Most of young people do not develop work experience or contacts with these companies until the end of the training period.
- Lack of education in values and attitudes towards work that are not considered the most adequate, and for which the educational system does not provide adequate training either.

Many workers have skills that exceed the requirements of their jobs. A mismatch between the skills of workers on the one hand and the skill requirements of jobs on the other implies a waste of talent that could otherwise be used to increase firm productivity and performance, as well as aggregate growth.

According to OECD (2015) Spain should implement the following actions:

- Create more incentives for universities to respond to changing labour market needs through University governance and hiring practices in Spain.
- Consolidate university evaluation processes and make more intensive use of indicators to improve the higher education system.
- Strengthen consistent criteria for evaluating programmes and professors across regions could potentially encourage greater mobility of both students and professors and foster greater competition among tertiary education institutions.
- Consider offering bursaries to students pursuing degrees in areas of skill shortages, based on the Occupations Observatory’s list of occupations in high demand, for example.
- Better linkages between tertiary institutions and employers would improve the labour market relevance of programmes. Increased mobility between university and the private sector could improve the quality and relevance of skills developed in tertiary education.

**Good practices in matching the requirements for graduates' soft-skills and labour market demands.** The Employers project, now in its second edition, was started by AQU Catalunya in 2014, with funding from Obra Social "la Caixa", with the aim of improving
the employability of graduates from universities and other higher education institutions in Catalonia. The goal of this project is to endow the university system with information to enable it to assess whether the range of education programmes offered should be adjusted in order to meet the needs of the labour market. The Employers project consists of three stages:

- Employers sector survey and drawing up of sector reports (2017-18),
- Discussion of sectorial results with main stakeholders (2019-20),
- Draw up of proposals of improvement.

**Phase 1: Employers’ survey and reports.** They survey to employers includes the following key questions:

- To what extent are employers satisfied with the education received by graduates?
- What factors explain the difficulties companies encounter in recruitment?
- What skills are lacking?

Regarding the skills, there is a battery of general skills common to all sectors, and a specific battery of skills for each sector. It is important to note that the Employers sectorial reports do include information gathered by other surveys, such as the graduate survey, which is a survey carried out to all Catalan universities each three years and the recent graduates satisfaction survey, which is an annual online survey, again common to all Catalan universities. Thus, in fact, the Employer reports gather 3 sources of external views about the quality of HE: employers, recent graduates, and graduates (which are contacted three years after graduation).

**Phase 2: Discussion seminars with key stakeholders.** The report is presented in a seminar, where all the degrees related to the sector are invited. The seminar has the following structure: presentation of the results of the report (which collects external view about the quality of the degrees), an international key speaker who presents the challenges of the degrees (for instance: “Facing the challenges of the 21st century – the future for economics and business education”, by Wendy Carlin, or “Design education, between strong roots and future challenges”, by Luisa Collina). And finally, a round table, that includes 1 academic, 2 employers and 1 graduate, discusses how to solve the challenges detected in the report.

**Phase 3: Drawing up of conclusions.** After the seminar is concluded, 5-10 proposals of improvement are proposed. Since this is the second edition, in some sectors (such as nursing or education degrees), they have already sector proposals of improvements of the first edition. For these degrees, instead of a seminar, there will be world-cafés in order to involve the responsible persons of education to reflect upon which proposals of improvement have been addressed, which not and what could be done in order to re-address the detected problems.
Generalization of the main trends and requirements for the soft-skills at the national labour markets. According to CEDEFOP 2018 Skills Forecast (CEDEFOP, 2018), Spanish economy will increase following years. Spain’s employment growth in the specific period (from 2011 to 2030) is estimated to be significantly (14%) above the EU-28 (6%)

Figure 17 shows the total job openings by broad occupational group over the period 2016–2030 in Spain.

*Figure 17. Job openings by broad occupational group, 2016-2030*
Most jobs will come from the need to replace workers retiring or changing occupations, but all the occupational groups are expected to create new jobs, except skilled agricultural and fishery workers. The occupation that is expected to have the highest number of job openings, out of which 80% are due to replacement needs, is service workers and shop and market sales workers, accounting for 21% of total job openings in Spain. The occupational group expected to increase the most in terms of new jobs is technicians and associate professionals.

Figure 18 shows the shares each qualification has within the total job openings.

*Figure 18. Share of total job openings by level of qualification, 2016-2030*
Figure 19 shows the change in the measures of various tasks in jobs in across the EU between 2015 and 2030. In terms of the tasks performed, there are three categories stand out for rapid growth projection. First, ICT is to grow strongest of all indicators, increasing in all Member States. Second, business literacy (processing verbal business information) and, third, selling/persuading (commercial activity) are projected to be the two most rapidly increasing tasks in terms of what work is done.

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Figure 19. Task indices change, 2015-2030

CONCLUSIONS

Although the understanding of soft-skills is similar at the national labour markets, the scope and classification of soft-skills partly differ and depend on the prevailing labour force qualification level and cultural/geographic characteristics. In some countries, the definition of soft-skills includes social or personal skills; or soft-skills is defined as part of transversal or transferable skills. Despite a variety in exact definition among the described national labour markets, the soft-skills mostly related to cognitive skills, decision-making, creativity, emotional intelligence, critical thinking, teamwork, communication.

Industry 4.0 coming with the optimization and digital transformation of manufacturing in all the industrial processes requires not only hard skills but extremely emphasizes soft-skills of employees. The research proves that well-developed soft-skills of employees may cause higher productivity and greater results of the activity. Nevertheless, the majority of employers highlight, that the young people arriving to national labour markets after their studies in HEI having their well-developed hard/professional skills, but missing their soft-skills especially in the following sectors as IT, engineering, manufacturing. Due to the fast technological change, the importance of soft-skills is obvious not only for young employees but also for elder ones as the practical skills of employees are growing old much faster than before.

Talking about soft-skills of graduates from the national HEIs or so-called employees' supply perspective, it is obvious that HEIs are actively searching for inclusive methods of how better to integrate soft-skills into HEI curricula and study programs. A number of various national initiatives and supportive training programs related to soft-skills development for students at all levels (Bachelor/ Master/ PhD) partly minimizes the gap between the acquired and required soft-skills in the national labour markets.

Institutional and legal requirements (QF-EHEA, study field descriptors, the Bologna Process agreements, national laws in the education area, etc.) encourage HEIs to include and pay more attention to soft-skills development in the study processes. However, the successful training of soft-skills at the university level requires the necessary pedagogical adjustments in both curricular components and professional practices in order to train people with the skills for "doing" as well as with the skills necessary for "being". Therefore, the main difficulties for the effective soft-skills development in HEIs include: 1) lack of activities for teachers aimed to strengthen educational innovation and methods; 2) lack of strategic insights and policies in terms of coordination among universities and assessment tools and methods for the soft-skills at the national level.

It is quite hard to measure and compare soft-skills imbalances in different countries due to the absence of information and the lack of a common assessment system. However, it is obvious, that soft-skills mismatch varies by country or region. Different level of
inclusion of local authorities create a clear response to the soft-skills demand in a particular country or region. This proves that the role of stakeholders is crucial in decreasing of the soft-skills mismatch due to translating information from soft-skills anticipation activities into standards and learning outcomes in HEIs as well as influencing the relevance of government policy and legislation.

Review of good practices in developing soft-skills in different countries showed a variety of HEIs initiatives including educational models, platforms, or programs that strengthen and facilitate the integration of soft-skills in an academic and socio-cultural environment and develop their professional intelligence in a broader context. In some countries, the shortage of soft-skills training provision is compensated by the existence of a wide range of supportive courses coming from private training companies that build their business to fill this gap.

The main findings, summarizing the current situation in five EU countries, regarding the soft-skills supply and demand are provided below.

Belgium. Despite the obstacles related to the national standardization system and lack of coordinated authority between different regions, Belgium is making great efforts to introduce soft-skills to the curricula of HEIs. Belgium has made a substantial investment in the high education system with a strong emphasis on hard skills strengthening in past years. However, this caused the foreseen effect - an increasing tendency of labour force over qualification, while authorities are trying to break up the labour bottlenecks that affect several sectors of Belgium economy. From the other side, HEIs have a commitment to increase the employability of its students, despite they are producing standardized generations of future competitors on job applications. This create a challenge for HEI how to strengthen soft-skills and facilitate the personalization of the future profile of students as a potential employee.

Italy. The current situation of soft-skills mismatch in Italy might be solved by placing more efforts on education and lifelong learning and using an effective human resource management system that allows implementing hiring procedures and staff allocation on skills needed in each job vacancy. Some research shows, that there is still a long path to reach an adequate level of awareness on soft-skills, both in HEIs and in the work environment in Italy. Some recommendations in terms of national coordination and support of soft-skills in Italy are related to 1) improving the quality and relevance of soft-skills acquired in HEIs; 2) increasing funding linked to performance indicators based also on employability and skills’ acquisition outcomes; 3) widening the training and other initiatives offering soft-skills strengthening; 4 supporting a closer link between education and regional smart specialization strategies; 5) fostering collaboration between universities and companies, thus offering work-based training opportunities.

Lithuania. Despite a reasonable supply of soft-skills provided by HEI, the research showed the shortages of soft-skills among employees in Lithuania. The shortages are concentrated among content skills (i.e. reading comprehension, writing, speaking, and active listening), process skills (i.e. critical thinking and active learning), complex problem-solving skills, and social skills (i.e. instructing, social perceptiveness), etc.
Lithuanian governmental institutions with various stakeholders making many efforts for the successful improving the Lithuanian longer-term skills forecasting capability and integration of them into the new study programs and courses of HEI. The importance of soft-skills is obvious as they are valuable and highly demanding elements in the entire Lithuanian skills system.

**Romania.** The problem of the soft-skills mismatch in Romania is solved using the support by the stakeholders which try to explore new ways for HEIs by offering the initiatives for study programs as well maintaining professional development level, through project-based learning, service-learning, and project-based dual learning methods, correlated with internships and practical stages within socio-economical actors. Even the soft-skills are presented within all the qualification frameworks for HEIs study programs, there are few activities/events organized especially for their development in Romania. A common practice is that soft-skills are acquired through non-formal learning in interaction with colleagues and teachers.

**Spain.** The main problems regarding the soft-skills imbalance in Spain are related to 1) shortage of employees having the balance of soft and hard skills; 2) inability to present oneself, to express one’s needs and work in a team; 3) lack of understanding of values and attitudes towards the work; 4) low impact of HEIs in developing of soft-skills. Many employees are acquiring high-quality hard skills that usually exceed the requirements of their jobs, but missing an appropriate level of soft-skills. A mismatch between those skills implies a waste of talent and negatively cause the productivity of the companies and aggregate growth of the country. The main soft-skills will be important in the future for the Spanish labour market are the following 1) problem solving and decision making; 2) practical training; 3) project management; 4) languages.

In conclusion, the reports from Belgium, Italy, Lithuania, Romania and Spain prove the importance of soft-skills for current and future employees in the labour market. For universities to have a real impact on labour market outcomes, it is essential that their educational offer match the skills demanded by employers.

OECD (2019) in their report on Future of Education and Skills 2030 highlights the current trends such as globalisation and advances in artificial intelligence that change the demands of the labour market. Artificial intelligence (AI) gets an increased attention and integration, and so does the human intelligence. There is a need to determine what is wanted from human intelligence, how it can work with AI, how human and artificial intelligence can complement each other. Therefore, it is important to understand what new knowledge and skills must be acquired and cultivated. It seems that especially now the people need to rely even more on their uniquely human capacity for creativity, responsibility, emotional intelligence, empathy and the ability to learn throughout their life.
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